**PARTNER SOLUTION OVERVIEW**

# Aruba & Thermokon
## Intelligent Building Automation

## INTRODUCTION

Internet of Things (IoT) devices enable machines and humans to interact. When IoT data are combined with contextual information on an occupant's identity, location, applications in use, and security posture, the resulting "hyper-awareness" helps to optimize both building and occupant efficiency, productivity, safety, and security.

While much has been written about using IoT to improve building energy efficiency, hyper-awareness plays a central role in maximizing the value of human capital. Commercial real estate services company Jones Lang LaSalle[1] observed that, in general real estate tenants spend roughly $3 per square foot (0.092 per square meter) per year for utilities, $30 for rent, and $300 for payroll. This "3-30-300" rule of thumb shows the leverage that comes from making the people on the payroll more productive and efficient.

Room climate controls play an important role in the comfort, health, and efficiency of people occupying hoteling spaces, conference rooms, offices, labs, and dining areas. Ambient light levels, air flow, temperature, and humidity directly impact occupant productivity, infection control, and sense of wellbeing.

Fully instrumenting a facility using wired IoT sensors is very expensive, especially in older buildings. Battery operated wireless IoT devices are initially less expensive, but the cost of changing batteries – including truck rolls and ladder climbs – can be prohibitive.

Combining long-distance 800/900MHz wireless radios with energy harvesting power sources eliminates wires, batteries, and routine maintenance. IoT sensors and actuators can be easily and inexpensively deployed wherever necessary, often with unskilled labor.

### WHY ARUBA AND THERMOKON?

- Wide range of sensors and actuators for hyper-aware smart building applications
- Retrofits to compatible existing Aruba access points without a rip-and-replace
- Reduces life-cycle costs by eliminating IoT device batteries and wires
- Enhances security by tunneling IoT data to target applications and eliminating hardware gateways
- Leverages open ISO standard IoT protocol
- Compatible with a broad range of on-premises and cloud application including Microsoft Azure IoT
- Provides peace of mind with validated interoperability

Interfacing IoT devices with Aruba access points provides a secure pathway back to IoT applications over a zero trust infrastructure, and allows IoT devices to be quickly deployed or retrofit virtually anywhere.

Thermokon is a leading supplier of intelligent building sensors and actuators for occupancy, temperature, humidity, air quality, and light level control. The EasySens® product portfolio integrates ISO-standard EnOcean wireless and energy harvesting technology to simplify and reduce the cost of device deployments.

Aruba and Thermokon have teamed to enable existing Aruba access points equipped with an EnOcean 800/900MHz USB adapter to securely connect EasySens devices with on-premises or cloud applications. The USB adapter is compatible with both Wi-Fi 5 and Wi-Fi 6 Aruba access points, allowing Thermokon devices to be easily added to both existing and new Aruba deployments.

[1] Jones, Lang, LaSalle, A surprising way to cut real estate costs, https://www.us.jll.com/en/trends-and-insights/workplace/a-surprising-way-to-cut-real-estate-costs, 16 September 2016

## Thermokon®
HOME OF SENSOR TECHNOLOGY

**Figure 1:** Aruba and Thermokon joint solution diagram

Aruba access points serve as secure gateways. Eliminating the need for hardware gateways. A Websocket or MQTT connection between the access point and the server or cloud service securely streams IoT data up- and down-stream.

Advantages of the joint solution include:

- Allows IT to accommodate facility, compliance, security, and other IoT requirements over existing, secure Aruba infrastructure;
- Eliminates the cost and security vulnerabilities of hardware gateways and associated licenses and maintenance fees;
- Lowers the latency between IoT devices and the target application ;
- Lowers life-cycle costs by eliminating IoT device batteries;
- Compatible with on-premises and cloud IoT application including Microsoft Azure IoT.

**GETTING STARTED**

We've taken the guesswork out of deploying a joint solution by certifying the interoperability of Thermokon's wireless devices with Aruba infrastructure.

Set-up is a breeze:

- Install and configure Thermokon's EasySens devices;
- Plug compatible EnOcean USB adapters into Aruba access points running AOS 8.7 or higher in the area to be monitored;
- Configure the IP address of the Web socket connection.

## SUMMARY

Aruba has transformed its access points into IoT gateways, allowing EasySens devices to easily and inexpensively become part of a hyper-aware smart building. With a wide range of sensors and actuators, Thermokon is ideally positioned to optimize building and occupant efficiency, productivity, safety, and security. The no-maintenance design of Thermokon's energy harvesting devices lowers life-cycle operating costs, while the ability to retrofit to existing Aruba deployments eliminating the need to rip-and-replace IT infrastructure to accommodate changing IoT requirements.

To learn more about Aruba's hyper-aware solutions please go to arubanetworks.com/solutions/internet-of-things

## DEPEND ON THERMOKON

**thermokon**®
HOME OF SENSOR TECHNOLOGY

For more than 30 years, Thermokon is recognized worldwide for leveraging standards in intelligent buildings with engineering, innovation and quality "Made in Germany".

For more information on Thermokon, please visit **www.thermokon.de/en-gb/**

**aruba**
a Hewlett Packard
Enterprise company

PSO_Aruba&Thermokon_RVK_110521   a00116810enw

Contact us at **www.arubanetworks.com/contact**